

# **Presentation on theme: "V-SIPGW to V-SIPGW Connection"— Presentation transcript:**

## **1 V-SIPGW to V-SIPGW Connection**

2 PBXs can be connected using SIP as well as H.323. This document explains how to program above. Edition AA January 26, 2012 Panasonic System Networks CO., LTD. Communication Systems Business Unit Field Engineer Team

**2** Request PBX to PBX Network using SIP is required instead of H.323 because sometimes PBX by other maker does not support H.323. This network is used to call extension in other PBX or to call customer through other PBX in order to save charge of long distance call. Public Telephone Company (02) Public Telephone Company (03) Customer TRG1 TRG1 Sydney Office PBX : DSP : IP Network Melbourne Office PBX : DSP : V-SIP Trunk TRG8 V-SIP Trunk TRG8 Dial 101 Dial 0/ Ext Ext Ext This document uses TDE as “PBX by other maker”.

**3** Solution - SIP trunk and SIP trunk can be connected directly without SIP carrier. - When extension in NCP calls extension in TDE, TIE feature of NCP selects SIP line (TRG8 in this example). - When extension in NCP calls customer through TDE, ARS feature of NCP selects SIP line (TRG8 in this example). - When TDE receives call from NCP, TIE feature is applied if called number from NCP is not programmed in DDI table. TIE to CO also works. Public Telephone Company (02) Public Telephone Company (03) Customer TRG1 TRG1 Sydney Office PBX : DSP : IP Network Melbourne Office PBX : DSP : V-SIP Trunk TRG8 V-SIP Trunk TRG8 Dial 101 Dial 0/ Ext Ext Ext

## **4 Programming for SIP to SIP connection**

Programming and VoIP DSP card are required for both TDE and NCP.

### **5 1) Assign number of SIP-GW channel for Activation Key.**

SIP to SIP 4ch for IP-GW (H.323) 4ch for SIP-GW for example If all CHs are used for “IP-GW”, SIP-GW does not work.

### **6 4) Open “Port Property” of V-SIPGW16.**

2) Assign V- SIPGW16 card. 3) OUS V- SIPGW16. 4) Open “Port Property” of V-SIPGW16. SIP to SIP

### **7 5) Assign Channel Attribute. 1 port for Basic channel**

3 port for Additional channel for Basic channel SIP to SIP

### **8 7) Change SIP Server Port Number to “35060”.**

6) Assign IP Address of other PBX (IP address of TDE) for NCP (IP address of NCP) for TDE  
7) Change SIP Server Port Number to “35060”. SIP to SIP

**9** SIP to SIP 8) Assign “User Name”, “Authentication ID” and “Authentication Password”. “12345” is OK.

#### **10 9) Change Register Ability to “Disable”.**

SIP to SIP 9) Change Register Ability to “Disable”.

**11** SIP to SIP 10) Assign “PBX CLIP” to send extension number as CLIP for TIE call and CLIP ID for ARS call. User Name / Authentication ID = See step 8. These are informed as CLIP if these are assigned for above.

#### **12 11. Enable CNIP to send and receive extension name.**

SIP to SIP 11. Enable CNIP to send and receive extension name.

**13** SIP to SIP 12) INS V- SIPGW16.

#### **14 Programming for TIE Call**

Sydney Office PBX : DSP : IP Network Melbourne Office PBX : DSP : V-SIP Trunk TRG8 V-SIP Trunk TRG8 Dial 101 Ext 101 Ext 102 Ext 203

**15** TIE Programming for TIE through SIP is same as TIE through H Set “TRG8” to SIP Trunk. (TRG8 is example.) 2. Set TIE table to TRG8 for leading digits to call other PBX. 3. Enable “TIE call by Extension Numbering”. (Activation key is required.) Activation Key (Enhanced Feature) KX-NCS3910 for NCP KX-NCS4910 for TDE KX-NCS4950 for TDE600

**16** 4) Set Dialing Plan. This setting is required to call using SIP w/o # or time out.

#### **17 Programming for ARS Call**

TRG1 IP Network V-SIP Trunk TRG8 V-SIP Trunk TRG8 Dial 0/ Ext Ext

#### **18 Public Telephone Company (02)**

ARS (NCP) Programming for ARS through SIP is same as ARS through H ) Assign TRG8 (SIP trunk) for ARS instead of TRG7 (Default for H.323). 2) Add “0/9” (ARS/Local CO access no. of TDE) by ARS table in NCP. Public Telephone Company (02) Dial TRG1 Dial 0/ IP Network V-SIP Trunk TRG8 V-SIP Trunk TRG8 Dial 0/ Ext Ext

**19** 3) Set Dialing Plan. This setting is required to call using SIP w/o # or time out. 0/9-02xxxxxxxx is sent from NCP by ARS through SIP trunk to TDE.

#### **20 Programming for TIE to CO**

TRG1 IP Network V-SIP Trunk V-SIP Trunk TRG7 TRG7

**21** TIE to CO (TDE) 1) TIE to CO is restricted by default. COS default for TRG is COS 7 (= TRS 7). So change COS for TRG8 in TDE to COS Or override TRS using verification code. NCP has to add verification code by ARS. TRG1 IP Network V-SIP Trunk V-SIP Trunk TRG8 TRG8

**22** TIE to CO (TDE) 2) System reserved bit (D-5) is required for TIE(DDI) to CO, if TIE(DDI) line is SIP.

### **23 D. Restrict DDI to Public (1)**

Reference DDI to Public call is restricted from version 5. Indirect call such as Fwd is not restricted. Telephone Network SIP Provider DDI Dial Home This restriction can be removed by system reserved bit D-5. Ext 101 DDI Ext 102 DDI Ext 102 can be called from other extension by "102". Ext 102 can call the home by ". Ext 102 can be called by DDI ". Some employee may try DDI " " instead of " " from outside without caller ID display. => Some SIP provider may allow this call. But this does not happen even for TDE-NCP version 4, because TRS level for call from trunk is 7 (Cannot call) by default. TDE-NCP version 5 restricts this call even for other TRS level.

### **24 D. Restrict DDI to Public (2)**

Reference DDI to Public call is restricted from version 5. Delete the DDI call routing to public line

### **25 End of Document**